

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) ~~In a server, a A method of handling a network connection, the network connection including a client to server channel and a server to client channel, the method comprising:~~

~~establishing a network connection between a server and an external client, the network connection including a client-to-server channel and a server-to-client channel;~~

~~receiving at the server a request from the client for a response by the server;~~

~~before preparing a response to the client request, the server examining local server information to determine whether the client-to-server channel of the network connection with the requesting client is still established; and~~

~~the server not preparing the aborting response preparation to a to the client request if the client-to-server channel is determined to be no longer established.~~

2. (Currently Amended) The method of claim 1, wherein a state of the server-to-client channel is inferred according to whether the client-to-server channel is still established; and wherein ~~the response preparation is aborted the server does not prepare the response to the client request~~ if the server-to-client channel is inferred to be closed.

3. (Original) The method of claim 1, wherein the server includes a read buffer; wherein the client request is read from the read buffer; and wherein the read buffer is then probed to determine whether the client-to-server channel is still established.

4. (Previously Presented) The method of claim 1, wherein the server maintains local information about the state of the client-to-server channel; wherein a specific state of the client-to-server channel is determined by examining the local information; and wherein the response preparation is aborted if the local information indicates that the client-to-server channel is in the specific state.

5. (Previously Presented) The method of claim 4, wherein the client-to-server channel is determined to be no longer established if the local information indicates that the client-to-server channel is in a "CLOSE_WAIT" state.

6. (Currently Amended) The method of claim 1, wherein the state of the client-to-server channel is determined by polling the local information while a response to the client request is being prepared, whereby upon determination that the client-to-server channel is no longer established the response preparation can be ~~is~~ aborted while a request is being prepared before the response is prepared by the server for sending to the client.

7. (Currently Amended) The method of claim 1, further comprising:
responsive to receiving said request, the server beginning to prepare the response to the requesting client;

generating an interrupt on the server when the client-to-server channel is determined to be no longer established; and, wherein a response to the client request is processed until the interrupt is generated

responsive to said interrupt, the server aborting preparing the response before the response is prepared for sending to the requesting client.

8. (Currently Amended) A network server comprising:
a processing unit;
a network interface card for communicatively coupling with a client via a communication network; and

computer memory programmed to, responsive to a communicative coupling that includes a client-to-server channel and a server-to-client channel being established with a client and the server receiving from the client a request for a response, cause the processing unit to

(a) examine local server information to determine whether [[a]] the client-to-server channel is still established with the client requesting a response from the server, and;
and abort response preparation

(b) prepare a response to the requesting client only if the client-to-server channel with the requesting client is first determined to still be no longer established.

9. (Currently Amended) The server of claim 8, wherein a state of [[a]] the server-to-client channel with the requesting client is inferred according to whether the client-to-server channel with the requesting client is still established; and wherein the response preparation is aborted if the server-to-client channel with the requesting client is inferred to be closed.

10. (Previously Presented) The server of claim 9, further comprising a read buffer; wherein a client request is read from the read buffer; and wherein the read buffer is probed to determine whether the client-to-server channel is still established

11. (Previously Presented) The server of claim 8, wherein the memory includes local information about a state of the client-to-server channel; wherein a state of the client-to-server channel is determined by examining the local information; and wherein the response preparation is aborted if the local information indicates that the client-to-server channel is in the specific state.

12. (Previously Presented) The server of claim 11, wherein the client-to-server channel is determined to be no longer established if the local information indicates that the client-to-server channel is in a "CLOSE_WAIT" state.

13. (Previously Presented) The server of claim 8, wherein a state of the client-to-server channel is determined by polling the local information while a response to the client request is being prepared.

14. (Previously Presented) The server of claim 8, wherein the memory is programmed with a routine for commanding the processing unit to generate an interrupt when the client-to-server channel is determined to be no longer established, and wherein a response to a client request is processed until the interrupt is generated.

15. (Currently Amended) A ~~network~~ server comprising:

a processing unit;

first means for maintaining a queue of connections based on connection requests, each ~~network~~ connection communicatively coupling the server with an external client via a communication network, and each connection including a client-to-server channel and a server-to-client channel;

second means for accepting connections from the queue;

third means for examining local server information to determine whether the client-to-server channel of a given connection from the queue is still established; and

fourth means for aborting response preparation if it is determined that the client-to-server channel of the given connection is no longer established.

16. (Currently Amended) An article for a ~~network~~ server including a processing unit and a network interface card, the article comprising:

computer memory; and

a server program encoded in the computer memory, the server program commanding the processing unit to

(a) accept network connections for communicatively coupling the server with external clients via a communication network, each connection having a client-to-server channel and a server-to-client channel.[[;]]

(b) before a response to a client requesting the response is prepared by the server, examine local server information to determine whether the client-to-server channel of a given connection with the requesting client from the queue is still established.[[;]] and

(c) abort response preparation if the client-to-server channel of the given connection with the requesting client is determined to be no longer established.

17. (Currently Amended) The article of claim 16, wherein a state of the server-to-client channel of the given connection with the requesting client is inferred according to whether the corresponding client-to-server channel is still established.

18. (Currently Amended) The article of claim 16, wherein the memory is further encoded with local information about a state of the ~~given~~ connection with the requesting client; wherein the state of the ~~given~~ connection with the requesting client is determined by examining the local information; and wherein response preparation is aborted if the local information indicates that the client-to-server channel of the ~~given~~ connection with the requesting client is in the specific state.

19. (Currently Amended) The article of claim 16, wherein a state of the client-to-server channel of the ~~given~~ connection with the requesting client is determined by polling the local information, the local information being polled ~~while a response to a client request is being prepared concurrently with the server beginning to prepare the client request.~~

20. (Currently Amended) The article of claim 16, wherein the memory is further encoded with a routine for commanding the processing unit to generate an interrupt when the client-to-server channel of the ~~given~~ connection with the requesting client is determined to be no longer established, and wherein ~~a response to a client request is processed until the interrupt is generated responsive to the interrupt the server aborts the response preparation before a response is prepared for sending to the requesting client.~~

21. (Currently Amended) A computer program for executable by a processing unit, the program comprising instructions stored to computer-readable media, the instructions comprising:

instructions for commanding a processing unit of a server computer to maintain a queue of network connections with external clients based on connection requests[[],];

~~the program further comprising~~ instructions for commanding the processing unit to accept connections from the queue;

instructions for commanding the processing unit to examine local server information to determine whether a client-to-server channel of a given an accepted connection from the queue is still established;

instructions for commanding the processing unit to process a client request associated with the given accepted connection to prepare a response to the client if the client-to-server channel of the given accepted connection is first determined as still established; and

instructions for commanding the processing unit to forego abort response preparation for the associated client request if the client-to-server channel of the given accepted connection is determined as no longer established.

22. (New) The method of claim 1 wherein said server is a web server.

23. (New) The method of claim 22 wherein said response is a web page requested by the requesting client.

24. (New) The network server of claim 8 wherein said network server is a web server.

25. (New) The network server of claim 24 wherein said requested response is a web page.

26. (New) The server of claim 15 wherein said communication network is the Internet.

27. (New) The server of claim 15 wherein said server is a web server for serving web pages to clients via said communication network.

28. (New) The article of claim 16 wherein the communication network is one selected from the group consisting of:

a wide area network, a local area network, the Internet.

29. (New) The article of claim 16 wherein the server is a web server.

C | 30. (New) The computer program of claim 21 wherein said server computer is a web server.

31. (New) The computer program of claim 30 wherein said client request is a request for a web page.
